

Notice of Allowability

Application No.

10/586,440

Examiner

RAFFERTY KELLY

Applicant(s)

NAKABE ET AL.

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/17/09.
2. ☒ The allowed claim(s) is/are 1,2,5-7 and 9-21.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 20100226.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

DETAILED ACTION

Amendment filed on 11/17/09 has been acknowledged and entered.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kenneth Fields (Reg. No. 52,430) on 2-25-10.

The application has been amended as follows:

Replace claim 1 with the following:

1. A contactless card that communicates with a reader/writer after being supplied with electric power, the contactless card having an identifier that identifies the contactless card, the contactless card comprising:

a power detection unit operable to detect that electric power has been supplied for enabling communication to take place between the contactless card and the reader/writer;

an identifier determination unit operable to determine an identifier that identifies the contactless card, every time the power detection unit detects that electric power has been supplied for enabling communication to take place between the contactless card and the reader/writer;

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an identifier storage unit operable to hold the identifier determined by the identifier determination unit;

a receiving unit operable to receive, from the reader/writer, a command requesting that the identifier that identifies the contactless card be sent to the reader/writer;

a first request judgment unit operable to judge, based on a first request judgment flag, whether the command received by the receiving unit is a first request command or a second or later request command;

a sending unit operable to send, to the reader/writer, the identifier that identifies the contactless card; and

a mode judgment unit operable to judge an operation mode included in a contactless mode in which the contactless card operates, by judging whether or not a voltage at a predetermined point in the contactless card is a predetermined voltage,

wherein the identifier determination unit includes:

a random identifier generation unit operable to generate an identifier in a random manner; and

a specific identifier generation unit operable to generate a specific identifier, wherein the judged operation mode included in the contactless mode is used to determine, independently of information received by the receiving unit, which one of (i) the random identifier generation unit and (ii) the specific identifier generation unit, is to be used to generate the identifier that identifies the contactless card, and

wherein the sending unit is operable to send, to the reader/writer, (i) a new

identifier determined by the identifier determination unit in the case where the first request judgment unit judges that the command received by the receiving unit is the first request command, and (ii) the identifier held in the identifier storage unit in the case where the first request judgment unit judges that the command received by the receiving unit is the second or later request command.

Replace claim 2 with the following:

2. A contactless card according to Claim 1,

wherein every time the power detection unit detects that electric power has been supplied for enabling communication to take place between the contactless card, one of the random identifier generation unit and the specific identifier generation unit generates a new identifier.

Replace claim 13 with the following:

13. A communication method performed by a contactless card to send an identifier that identifies the contactless card, the contactless card communicating with a reader/writer after being supplied with electric power, the method comprising:

detecting that electric power has been supplied for enabling communication to take place between the contactless card and the reader/writer;

receiving, from the reader/writer, a command requesting that the identifier that identifies the contactless card be sent to the reader/writer;

judging, based on a first request judgment flag, whether the command received

in said receiving is a first request command or a second or later request command;

judging an operation mode included in a contactless mode in which the contactless card operates by judging whether or not a voltage at a predetermined point in the contactless card is a predetermined voltage;

determining, depending on said judged operation mode included in the contactless mode in said judging of the operation mode, and independently of information received from the reader/writer in said receiving, whether the identifier that identifies the contactless card is to be a random identifier or a specific identifier, said determining being performed every time said detecting detects that electric power has been supplied for enabling communication to take place between the contactless card and the reader/writer;

generating, based on said determining, the random identifier or the specific identifier, the generated identifier to be used as the identifier that identifies the contactless card;

storing the generated identifier into a storage unit; and

sending, to the reader/writer, (i) a new identifier generated in said generating in the case where it is judged in said judging, based on the first request judgment flag, that the command received in said receiving is the first request command, and (ii) the generated identifier stored into the storage unit in said storing in the case where it is judged in said judging, based on the first request judgment flag, that the command received in said receiving is the second or later request command.

Replace claim 14 with the following:

14. An integrated circuit in a contactless card that communicates with a reader/writer after being supplied with electric power, the contactless card having an identifier that identifies the contactless card, the integrated circuit comprising:

 a power detection unit operable to detect that electric power has been supplied for enabling communication to take place between the contactless card and the reader/writer;

 an identifier determination unit operable to determine an identifier that identifies the contactless card, every time the power detection unit detects that electric power has been supplied for enabling communication to take place between the contactless card and the reader/writer;

 an identifier storage unit operable to hold the identifier determined by the identifier determination unit;

 a receiving unit operable to receive, from the reader/writer, a command requesting that the identifier that identifies the contactless card be sent to the reader/writer;

 a first request judgment unit operable to judge, based on a first request judgment flag, whether the command received by the receiving unit is a first request command or a second or later request command;

 a sending unit operable to send, to the reader/writer, the identifier that identifies the contactless card; and

 a mode judgment unit operable to judge an operation mode included in a

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contactless mode in which the contactless card operates by judging whether or not a voltage at a predetermined point in the contactless card is a predetermined voltage,

wherein the identifier determination unit includes:

a random identifier generation unit operable to generate an identifier in a random manner; and

a specific identifier generation unit operable to generate a specific identifier,

wherein the judged operation mode included in the contactless mode is used to determine, independently of information received by the receiving unit, which one of (i) the random identifier generation unit and (ii) the specific identifier generation unit, is to be used to generate the identifier that identifies the contactless card, and

wherein the sending unit is operable to send, to the reader/writer, (i) a new identifier determined by the identifier determination unit in the case where the first request judgment unit judges that the command received by the receiving unit is the first request command, and (ii) the identifier held in the identifier storage unit in the case where the first request judgment unit judges that the command received by the receiving unit is the second or later request command.

Replace claim 15 with the following:

15. A program embodied on a storage medium for sending an identifier that identifies a contactless card, the contactless card being able to communicate with a reader/writer after being supplied with electric power, the program causing a computer to execute a method comprising:

detecting that electric power has been supplied for enabling communication to take place between the contactless card and the reader/writer;

receiving, from the reader/writer, a command requesting that the identifier that identifies the contactless card be sent to the reader/writer;

judging, based on a first request judgment flag, whether the command received in said receiving is a first request command or a second or later request command;

judging an operation mode included in a contactless mode in which the contactless card operates by judging whether or not a voltage at a predetermined point in the contactless card is a predetermined voltage;

determining, depending on said judged operation mode included in the contactless mode in said judging of the operation mode, and independently of information received from the reader/writer in said receiving, whether the identifier that identifies the contactless card is to be a random identifier or a specific identifier, said determining being performed every time said detecting detects that electric power has been supplied for enabling communication to take place between the contactless card and the reader/writer;

generating, based on said determining, the random identifier or the specific identifier, the generated identifier to be used as the identifier that identifies the contactless card;

storing the generated identifier into a storage unit; and

sending, to the reader/writer, (i) a new identifier generated in said generating in the case where it is judged in said judging, based on the first request judgment flag, that

the command received in said receiving is the first request command, and (ii) the generated identifier stored into the storage unit in said storing in the case where it is judged in said judging, based on the first request judgment flag, that the command received in said receiving is the second or later request command.

Replace claim 16 with the following:

16. A storage medium in which a program is stored for sending an identifier that identifies a contactless card, the contactless card being able to communicate with a reader/writer after being supplied with electric power, the program causing a computer to execute a method comprising:

detecting that electric power has been supplied for enabling communication to take place between the contactless card and the reader/writer;

receiving, from the reader/writer, a command requesting that the identifier that identifies the contactless card be sent to the reader/writer;

judging, based on a first request judgment flag, whether the command received in said receiving is a first request command or a second or later request command;

judging an operation mode included in a contactless mode in which the contactless card operates by judging whether or not a voltage at a predetermined point in the contactless card is a predetermined voltage;

determining, depending on said judged operation mode included in the contactless mode in said judging of the operation mode, and independently of information received from the reader/writer in said receiving, whether the identifier that

identifies the contactless card is to be a random identifier or a specific identifier, said determining being performed every time said detecting detects that electric power has been supplied for enabling communication to take place between the contactless card and the reader/writer;

generating, based on said determining, the random identifier or the specific identifier, the generated identifier to be used as the identifier that identifies the contactless card;

storing the generated identifier into a storage unit; and

sending, to the reader/writer, (i) a new identifier generated in said generating in the case where it is judged in said judging, based on the first request judgment flag, that the command received in said receiving is the first request command, and (ii) the generated identifier stored into the storage unit in said storing in the case where it is judged in said judging, based on the first request judgment flag, that the command received in said receiving is the second or later request command.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: no single reference or combination of references teaches all of the elements of the independent claims.

For example, "Identification cards – Contactless integrated circuit(s) cards – Proximity cards" (XP-001146902, hereinafter 14443-3) teaches a communication method for contactless cards. 14443-3 teaches determining different identifiers to use when identifying the card to a reader. However, 14443-3 is lacking some of the features of the present claims. 14443-3 lacks making a judgement based on a voltage at a predetermined point. Further, 14443-3 lacks determining an operation mode independent of information received by the receiving unit. Further, 14443-3 lacks teaching the interaction between the sending unit and the judgment unit as claimed.

Roz (US 6462647 B1) teaches a contactless transponder device that is capable of switching modes. In Roz, the transponder is switched between an active mode and a passive mode. Berger et al. (US 6168083 B1) also teaches mode-switching in identification card. In Berger, the mode is switched between contact and contactless modes. Brandys (US 2002/0186838 A1) teaches switching modes between a more secure mode and a less secure mode. Based on the above teachings, the concept of switching modes in contactless cards is well known in the art. However, no single reference above or combination of references teaches mode switching as is performed in the present claims. For example, no single reference or combination teaches "wherein the sending unit is operable to send, to the reader/writer, (i) a new identifier determined by the identifier determination unit in the case where the first request judgment unit judges that the command received by the receiving unit is the first request command, and (ii) the identifier held in the identifier storage unit in the case where the first request judgment unit judges that the command received by the receiving unit is the

second or later request command". This feature, when combined with the request judgement, mode judgement, and identifier generation units/steps is not taught in the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAFFERTY KELLY whose telephone number is (571)270-5031. The examiner can normally be reached on Mon. - Fri. 800-1730 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2876

/Rafferty Kelly/
Examiner, Art Unit 2876
2-26-10

/Michael G Lee/
Supervisory Patent Examiner, Art Unit 2876